



Department of Energy
Washington, DC 20585

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MEMORANDUM FOR DISTRIBUTION

FROM:

DR. STEVEN L. KRAHN
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SAFETY AND SECURITY PROGRAM
ENVIRONMENTAL MANAGEMENT

[Signature] For:

SUBJECT:

Issuance of Environmental Management Capital and
Major Operating Project Standard Review Plan Edition Two

The Office of Environmental Management (EM) is responsible for managing the design, construction, operation, and eventual disposition of mission critical projects/facilities. Effective management of these projects requires multiple disciplines to be integrated and engaged at various project lifecycle phases. These disciplines include project management, engineering, design, safety, environment, safeguards and security, and quality assurance. The lessons-learned to date from ongoing Headquarters (HQ) and Field project reviews [e.g., Construction Project Reviews (CPRs)] and institutional experience gained in managing large scale projects have highlighted the need for a more focused, technically in-depth, and standardized approach to project reviews performed at Critical Decision (CD) points.

This memorandum introduces the Second Edition of the Capital and Major Operations Projects Standard Review Plan (SRP). The SRP is developed as a collaborative effort between EM and the Chief of Nuclear Safety (CNS), Office of the Under Secretary. The use and application of the SRP was initially communicated in FY 2009 by EM senior leadership. The SRP is designed to improve project performance by strengthening and formalizing the technical basis for evaluating the readiness of EM Capital and Major Operating Projects. Corporately, the SRP is designed to enhance transparency and clarity of requirements and expectations related to capital and construction projects, ensure a technically sound and rigorous review process, and promote technical consistency and stability in corporate decision making. The SRP has been posted on the EM website (<http://www.em.doe.gov/Pages/Safety.aspx>) and hard copies will be sent to the field office Managers as well as FPDs by separate mailing. The CNS and EM-HQ staff is available to assist in using the SRP.

The technical basis and foundation for the SRP is centered on project expectations and requirements defined in DOE O 413.3A, Change 1, *Program and Project Management for the Acquisition of Capital Asset*, DOE-STD-1189-2008, *Integration of Safety into the Design Process*, and EM's internal business management practices. The SRP also leverages the best practices and lessons-learned from existing directives and consensus standards, and from across the Department of Energy.



The Second Edition SRP is developed in a series of 28 stand-alone Review Modules (RMs) and Topical Reports which provide a set of core performance objectives and criteria in addressing specific project review areas tailored to each CD phase. These modules are grouped by Project Management; Engineering and Design; Safety; Environment; Security; and Quality Assurance (see Attachment 1 for a detailed listing). Several of the RMs have been piloted as part of project reviews (e.g., CPRs). This work has provided valuable feedback from subject matter practitioners and field personnel, significantly enhancing the review modules that make up the SRP. The SRP is designed as a "living" document to be tailored to specific project needs and, in turn, improved by lessons-learned. The Federal project Directors (FPDs) play a critical role in providing feedback and lessons-learned gained from project-specific applications.

The corporate expectation is that all EM organizations/projects will use the SRP as the technical basis and starting point in the following areas:

1. Project reviews conducted by Headquarters/Field including:
 - a. CPRs;
 - b. Technical Authority Board;
 - c. Construction Readiness Reviews;
 - d. Engineering, Design, and Technology Reviews;
 - e. Project Management (e.g., cost, schedule, risk, contracts);
 - f. Safety Reviews including nuclear safety and worker safety;
 - g. Commissioning and Testing;
 - h. Security;
 - i. Environmental compliance;
 - j. Readiness Reviews; and
 - k. Quality Assurance
2. Day-to-day project review and project oversight activities conducted by the FPDs and the Integrated Project Teams
3. Verification of completion of project CD requirements by FPDs for Energy Systems Acquisition Advisory Board review and approval by the Secretarial Acquisition Executive
4. Verification of completion of project CD requirements by FPDs for Environmental Management Acquisition Advisory Board review and approval by the EM Acquisition Executive

If you have any questions or need assistance, please contact Dr. Tim Arcano of CNS at joseph.arcano@hq.doe.gov (301) 903-0139 or myself at steve.krahn@em.doe.gov (202) 586-5151.

Attachment

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Attachment 1: EM Standard Review Plan (SRP) Review Modules

SRP Section	SRP Subsection	Applicable CD Phase(s)						Pilot Reviews of SRP Modules
		CD-0	CD-1	CD-2	CD-3	CD-4	Post CD-4	
Overview	Overview of Critical Decision Framework and Strategy	•	•	•	•	•	•	--
	Review Plan and Final Report Preparation	•	•	•	•	•	•	--
Project Management	Project Execution Plan Review Module (RM)	•	•	•	•	•		--
	Risk Management RM	•	•	•	•	•		--
	Integrated Project Team RM	•	•	•	•	•		Piloted at the U233 project at ORO
	Earned Value Management System (EVMS) RM	•	•	•	•	•		Piloted at the U233 project at ORO
	Acquisition Strategy RM	•						--
	Decommissioning Plan RM						•	--
Engineering and Design	Site Transition Guidance						•	--
	Conceptual Design RM		•					--
	Preliminary Design RM			•				Piloted at the U233 project at ORO
	Final Design RM				•			Piloted at the U233 project at ORO and the SWPF project at SRS
	Construction Readiness RM				•			Piloted at the SWPF project in Savannah River
	Checkout, Testing, and Commissioning Plan RM				•	•		Piloted at the DUF 6 project at PPO
	Readiness Review RM				•	•		--
	Seismic Design Expectations Report	•	•	•	•	•	•	--

SRP Section	SRP Subsection	Applicable CD Phase(s)						
		CD-0	CD-1	CD-2	CD-3	CD-4	Post CD-4	Pilot Reviews of SRP Modules
	Interim Policy of Code of Record	•	•	•	•	•	•	--
	Technology Readiness Assessment and Technology Maturation Plan Process Guide	•	•	•	•	•		--
	External Technical Review Report	•	•	•	•	•		--
	Safety Design Strategy (SDS) RM	•	•	•	•	•		Piloted at the U233 project at ORO
	Conceptual Safety Design RM		•					--
	Preliminary Safety Design RM			•				--
Safety	Facility Disposition Safety Strategy RM						•	--
	Construction Project Health and Safety Plan			•	•			Piloted at the IWTU project at INL
	Review of SAR for Packaging						•	--
Environment	National Environmental Policy Act (NEPA) RM	•	•	•	•	•		Piloted at the U233 project at ORO
	High Performance Sustainable Building Design RM		•	•	•	•		Piloted at the SWPF project and the MOX project at SRS
	Safeguards and Security and Cyber Security RM	•	•	•	•	•	•	Piloted at the U233 project at ORO
Quality Assurance	Quality Assurance for Critical Decision Reviews Review Module		•	•	•	•		--
	Protocol for EM-HQ Review of EM Field/Site-Specific Quality Assurance Program (QAP)/Implementation Plans (QIP)		•	•	•	•		Piloted at the U233 project at ORO